

REMARKS

Claim rejections under 35 U.S.C. 103(a) as being unpatentable over EP '744 taken with JP '153

Claims 1-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 216 744 A1 ("EP '744") taken with Japanese Application 10249153 ("JP '153"). Applicants respectfully traverse the rejections. Reconsideration and withdrawal of the rejections are respectfully requested in view of the remarks.

Applicants reiterate and incorporate herein by reference all arguments and discussion made in Applicants' Amendment and Response under 37 CFR 1.111 filed on January 18, 2007.

EP '744 column 5, lines 52-56, discloses that CO₂ recovered from flue gas or other feed streams using the above process can be directly used as vapor for onsite applications. Several CO₂ applications such as pH control of wastewater can use CO₂ vapor directly from the absorption process. EP '744 column 6, lines 9-12, discloses that alternatively, the CO₂ recovered from flue gas or other feed streams using the chemical absorption process may need to be compressed for downstream recovery or sequestration. Applicants suggest that EP '744 discloses that CO₂ may be sequestered, but does not indicate the type of sequestration that may be used or that a sequestration may include a generation of heat.

JP '153, paragraph 0002, discloses that candidate methods that have been considered presently for the effective fixation of CO₂ include: methods for synthesis of organic substances (e.g., methanol and the like) by reaction of CO₂ and H₂; methods for using CO₂ in artificial photosynthesis; methods for disposal by increasing concentration and liquefaction of CO₂ and injecting into the deep sea; methods of disposal of CO₂ by compression and storage within the earth in depleted oil fields, gas fields, etc.; and the like. Applicants suggest that a person skilled in the art will know that sequestration processes may include processes other than mineral carbonation.

JP '153, paragraph 0015, discloses that the reaction of this invention between CO₂ and the substance that contains at least calcium silicate and/or magnesium silicate proceeds according to the above mentioned reaction of Urey and that this

reaction proceeds sufficiently in the vicinity of room temperature due to the fine size of the powder and due to addition to the system of the chemical substance that generates acidity or alkalinity. However, the reaction rate increases with increasing temperature, and the temperature of the suspension solution is preferably greater than or equal to 30°C. Applicants suggest that the JP '153 disclosure at paragraph 0015 suggests an endothermic reaction.

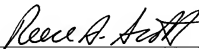
Applicants suggest that a person skilled in the art with knowledge of EP '744 would not include a mineral carbonation because there are many possible sequestration processes. Further, Applicants suggest that of the many possible sequestration processes available, mineral carbonation may be one of a few that would provide a benefit of a possible heat integration.

CONCLUSION

Applicants respectfully request reconsideration and withdrawal of the claim rejections under 35 U.S.C. 103(a). Applicants further respectfully request entry and consideration of the above remarks to advance the above-identified application to allowance.

Respectfully submitted,

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